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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,245	02/22/2005	Hideharu Tsuchiya	122572	5379

25944 7590 06/26/2008
OLIFF & BERRIDGE, PLC
P.O. BOX 320850
ALEXANDRIA, VA 22320-4850

EXAMINER

HENKEL, DANIELLE B

ART UNIT	PAPER NUMBER
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4112

MAIL DATE	DELIVERY MODE
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06/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/525,245

Applicant(s)

TSUCHIYA, HIDEHARU

Examiner

DANIELLE HENKEL

Art Unit

4112

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 02/22/2005

DETAILED ACTION

Summary

1. This is the initial Office action on the 10/525245 application filed on February 22, 2005.
2. In the amendment filed February 22, 2005 claims 1-18 were cancelled.
3. New claims 19-40 are pending and have been fully considered.

Specification

4. The disclosure is objected to because of the following informalities:
 - a. Summary of the Invention on Page 4, "There is provided a fist aspect" should be corrected to "There is provided a first aspect".
 - b. Detailed Description on Page 13, "A pair of holder seat 206 is" should be corrected to "A pair of holder seats 206 are"Appropriate correction is required.

Information Disclosure Statement

5. The information disclosure statement filed February 22, 2005 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language, specifically JP-62-125211, the information referred to therein has not been considered.

Claim Objections

6. Claims 23 and 33 are objected to because of the following informalities:
- a. Claim 23 refers to a "top plate is rest on" which is not grammatically correct. A suggested correction would be "top plate is rested on".
 - b. Claim 33 refers to "a cover plate being rest on the lid" which is not grammatically correct. A suggested correction would be "a cover plate being rested on the lid".
 - c. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. Claim 27 recites the limitation "the plate type heater" in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

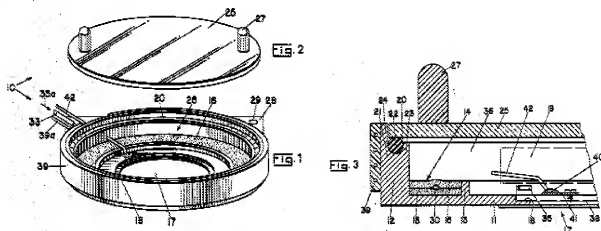
9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 19 and 29 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by BAKER (US 4301252).

a. With respect to claim 19, BAKER discloses a controlled environment incubator for light microscopy as seen below in Figures 1, 2, and 3. The incubator taught by BAKER has an upwardly extending cylindrical outer wall (12) on a base platform (11) with an observation hole (17) centrally of low inner wall (13) (at central portion) with a countersink (18) (container accommodating portion) that permits a conventional culture dish (19) (specimen container) (Column 3, lines 9-19). BAKER teaches moisture soaked annular pads (15, 16) (water reservoir, water tank) are located in the channel between the outer and inner walls surrounding the culture dish (Column 3, lines 14-16). The incubator taught by BAKER also includes a transparent, cylindrical cover plate (25) (lid) that seals off the upper opening of the incubator (Column 3, lines 26-28). BAKER also teaches a thermal heating means (39) (heater) to provide suitable survival temperature in the incubator (Column 3, lines 57-68). The incubator of BAKER also includes a hollow fiber tube (30) (gas pipe) connected to a supply tube (32) (gas supply tube) that is connected externally to a supply hose (33) to feed gases into the incubator (Column 3, lines 36-47). The observation hole (17) (light transmitting portion of unit) located in the center of bottom platform (11) and the transparent cover plate (25) (light transmitting portion of lid) allow continuous observation of cell cultures using either an upright or inverted microscope (transmitting light rays upwardly or downwardly) (Column 2, lines 17-23).



b. The means for language of claim 29 invokes 35 U.S.C. 112 6th paragraph interpretation in which the means is a pair of displacing or sliding mechanisms as stated in the specification on page 26. BAKER teaches fastening the incubator to a microscope stage's motion controls (displacing mechanisms) (Column 3, lines 31-35). BAKER also discloses the incubator is moved back and forth (horizontal displacement) under a microscope lens by the microscope stage controls (Column 4, lines 17-20).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 20, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) and further in view of DILLER (US 5257128).

a. With respect to claim 20, BAKER does not explicitly disclose a means for supplying water into the reservoir. The means for language used in claim 20 invokes 35 U.S.C. 112 6th paragraph interpretation such that the means for consists of a pipe, supply tube, and infusion reservoir as stated in the specification (Page 15). However DILLER teaches a perfusion stage for a microscope in which the perfusion system supplies fluid such as water through a fluid inlet tube (supply tube) from a fluid reservoir (infusion reservoir) which is fed through an inlet (pipe). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the perfusion system of DILLER. The motivation would have been that DILLER discloses the fluid system allows for serial perfusion of the specimen and rapid exchange of the bathing fluid with a low time constant while maintaining the specimen in focus of the microscopic field of view (Column 5, lines 30-35).

b. With respect to claim 24, BAKER does not explicitly disclose a nutrient medium supply means. The means for language used in claim 24 invokes 35 U.S.C. 112 6th paragraph interpretation such that the means for consists of a delivery tube, withdrawal tube, and media tank as stated in the specification (Page 14). However, DILLER teaches a perfusion stage for a microscope in which the perfusion system connected to the sample chamber (container)

includes a fluid inlet tube (tube for delivery), a fluid outlet tube (tube for withdrawal), and a fluid reservoir (media tank) connected to the inlet tube (Column 12, lines 17-20). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the perfusion system of DILLER. The motivation would have been that DILLER discloses the fluid system allows for serial perfusion of the specimen and rapid exchange of the bathing medium with a low time constant while maintaining the specimen in focus of the microscopic field of view (Column 5, lines 30-35).

c. With respect to claim 25, BAKER does not explicitly disclose a nutrient supplying means that enables the replenishment of the nutrient medium without removing the lid of the unit. However, the perfusion stage for a microscope shown by DILLER in Figure 2 and described above in modified BAKER, allows for the inlet of fluid (71) from a reservoir (82) to the sample chamber (14) without the removal of the cover (lid) (12).

13. Claims 21, 22, 23, 27, 28, 32, 33, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252) and further in view of KITAGAWA (US 4629862).

d. With respect to claim 21, BAKER teaches an observation hole located in the center of bottom platform and a transparent (light ray transmitting) cover plate (lid) allow continuous observation of cell cultures using either an upright or inverted microscope (Column 2, lines 17-23). BAKER does not explicitly disclose

the heater to be a plate type heating the container from the bottom and provided with a light ray-transmitting portion. However, KITAGAWA teaches a sample heater for use in microscopes in which an embodiment includes a heater plate with a through-hole (light ray transmitting portion) that allows an objective lens of a microscope to be inserted into (Column 7, lines 65-66). A culture container is placed on the heater plate (Column 8, lines 1-2). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the plate heater with the light ray transmitting portion of KITAGAWA. The motivation would have been that KITAGAWA discloses the plate heater has a uniform distribution of temperature, increased thermal efficiency and reduced response time (Column 2, lines 54-61).

e. With respect to claims 22 and 23, BAKER discloses the incubator has an upwardly extending outer lip with a lower inner lip (inner flange, frame) to permit a cover plate (top plate) to be nested on the inner lip within the outer lip (Column 3, lines 20-29). This cover plate is spaced above the top surface of the inner culture container (Figure 3). BAKER does not explicitly disclose the frame for use with a heater made of laminate plates. However, KITAGAWA discloses a sheet heater (heating element) that is laminated in entirety (laminate upper and lower plates) with insulator layers (Column 11, lines 19-24). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the frame of the incubator for light microscopy of BAKER to hold the laminate heating element of KITAGAWA. The motivation would have been that KITAGAWA

discloses the structure has a reduced manufacturing cost and good water repelling properties (Column 11, lines 27-29).

f. With respect to claim 27, BAKER teaches an incubator that is fastened to the stage of a microscope (adapted to be placed on upper surface of microscope stage) (Column 3, lines 31-35) and an embodiment in which the heating means is a nozzle directing warm air to the incubator (not in contact with heater, separable) (Figure 6). BAKER does not explicitly disclose the specimen container separated from a plate type heater. However, KITAGAWA discloses an embodiment of a sample heater for use in a microscope with a laboratory dish culture container that has an annular projection on the bottom (Column 12, lines 57-65). KITAGAWA shows the annular projection on the culture container prevents it from directly contacting the plate heater below (not to contact the plate heater) and interposes a plate seat between the heating plate and container (spacing between) (Figure 23). KITAGAWA further discloses that the container is mounted through the plate seat on the upper surface of the heater plate with the plate seat fit in the annular projection of the container (unit and heater are separable) (Column 12, lines 11-15). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the plate heater not directly in contact with the culture container of KITAGAWA. The motivation would have been that KITAGAWA discloses the plate heater has a uniform distribution of temperature, increased thermal efficiency and reduced response time (Column 2, lines 54-61)

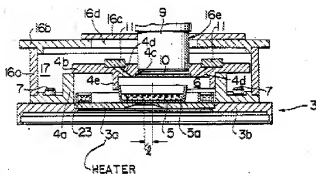
and that a space between the heater and culture container is due to the annular projection from the bottom of a laboratory dish (Column 12, lines 62-65).

g. With respect to claim 28, the limitations of claim 27 are met by the above combination of BAKER and KITAGAWA. Additionally BAKER teaches providing the base with an outward extending portion (28) with holes (29) (fixtures) to provide means for fastening the incubator onto (on upper surface) suitable observation means (microscope stage) (Column 3, lines 31-35).

h. With respect to claim 32, BAKER does not explicitly disclose the incubator unit having a lid with slots for carrying out operations on the specimen within. However, KITAGAWA teaches the sample heater has a lid (4b) on top of the culture container (5) with a through hole for the lens of a microscope (10) located centrally (accommodating portion for specimen container) and a plurality of through holes (4d) (slots) with covers (11) for the entry of a reagent or insertion of a temperature sensor (operations carried out to the specimen) (Column 6, lines 45-57). KITAGAWA also teaches the lid is slidable (lid is adjusted to shift) on the upper edge of the wall in an airtight manner (closing the opening of the unit) (Column 6, lines 55-57). The sliding of the lid places the through holes in direct alignment with the sample container (See Figure 3). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the lid with through holes of KITAGAWA. The motivation would have been that KITAGAWA discloses the lid allows for the entry of reagents or temperature and humidity sensors while

maintaining an airtight closure of the container (Column 6, lines 50-57).

FIG. 3



i. With respect to claim 33, BAKER discloses a cover for the incubator comprising a cover plate (lid) with a viewing aperture centered above the culture dish (region of the accommodating portion) to allow the use of a high power objective lens while retaining the ability to focus on the cell culture (Column 4, lines 37-34). BAKER does not explicitly disclose the aperture being covered with a cover plate that can be displaced. However, KITAGAWA teaches a lid for a sample heater with through holes which are open and closed by lids provided on the surface of the main lid (cover plate displaced relative to upper surface of lid) (Column 6, lines 48-52). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the cover with an aperture in the incubator for light microscopy of BAKER to include the lids of KITAGAWA. The motivation would have been that KITAGAWA discloses the lid maintains an airtight closure of the container while still allowing the entry of necessary objects (Column 6, lines 50-57).

- j. With respect to claim 37, the limitations of claims 27 and 28 are considered met by the above combination of BAKER and KITAGAWA. Additionally BAKER discloses a clip (centering member) biased toward the culture dish to hold it firmly in place in the countersink (tool fitting hole) to maintain optical alignment of the culture cells (center unit in hole) (Column 4, lines 8-12). BAKER also discloses portion of the platform extending outward (around the peripheral portion of the unit) which have holes to provide a means for fastening (in contact with fixtures) the incubator to the stage (Column 3, lines 31-35).
14. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252), and further in view of FOCHT (US 5552321).
- a. With respect to claim 26, BAKER discloses a clip to hold the culture dish in the countersink to maintain alignment of the culture cells (Column 4, lines 8-11). Baker does not explicitly disclose the use of a pair of holders across the central portion of the unit. However, FOCHT discloses a culture dish apparatus that has retaining tabs (Figure 1, #13) (container holders) that are pivoted or slideably (adjustable spacing) moved to hold the culture dish in the recess (container accommodating portion) located in the center of the stage insert (Figure 1, Column 3, lines 65-67). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the retaining tabs of FOCHT. The motivation would have been the retaining tabs lock the culture dish assembly into position to

allow proper connection to the heating elements of the incubator as FOCHT discloses (Column 4, lines 1-12).

15. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252), and further in view of KURESHY (US 5192506).

a. With respect to claim 30, BAKER does not disclose the incubator having an entrance opening in the side wall with a closure member for closing and opening the entrance. However, KURESHY teaches an incubator port closure system that provides a door or shutter (side closure member) for closing or blocking the injection port (entrance opening) in the outer wall of the incubator (wall of the unit) for the insertion and removal of assay cartridges (Column 12, lines 60-68). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the incubator door with closure of KURESHY. The motivation would have been that KURESHY discloses that it would be desirable to block the port when the cartridges are not being inserted or extracted from the incubator as the port permits air flow between the inside and outside of the incubator and causes undesirable variation in the chamber temperature (Column 2, lines 42-48).

16. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252, in view of KURESHY (US 5192506) as applied to claim 30 above, and further in view of FOCHT (US).

b. The limitations of claim 30 are met by the above combination of BAKER and KURESHY. With respect to claim 31, neither BAKER nor KURESHY

explicitly disclose the heater adapted to be fit into a tool fitting hole. However, FOCHT shows a culture dish (heater) that is adapted to fit into a hole in the center of a microscope stage (Figures 1 and 4). FOCHT also discloses the culture dish assembly rests on the lower surface of a ring mount so that the culture dish bottom does not directly contact the surface (Column 3, lines 16-21) and the culture dish is aligned with the microscope stage (Figure 4). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER with the incubator door of KURESHY to include a heater adapted to be fit into a hole of FOCHT. The motivation would have been that FOCHT discloses this allows for the separation of the dish and the stage so that the dish can be lowered into the recess making it possible to exchange the dish (Column 3, lines 24-25).

17. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252), and further in view of MIDDLEBROOK (US 5181382).

a. With respect to claim 38, BAKER discloses the incubator with a culture dish (body open) with an upper surface (lid) (Column 4, line 40). Neither BAKER nor KURESHY explicitly disclose a lid provided with connections for the tubes. However, MIDDLEBROOK teaches a stage assembly in which the upper plate (lid) has three holes (aperture for connecting tube, channel) that extend angularly downwardly and centrally inwardly into the specimen chamber (lower surface of lid) (Column 6, lines 53-60). These holes are then connected to perfusion tubing, aspiration tubing or a sensor (Column 6, lines 57-64). At the time of the invention,

it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the lid with tube connections of MIDDLEBROOK. The motivation would have been that the system of MIDDLEBROOK does not require bulky positioning devices that compete for available space on the microscope stage (Column 1 line 66- Column 2 line 4).

18. Claims 34 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252), and further in view of ARGENTIERI (US 5241415).

a. With respect to claim 34, BAKER does not explicitly disclose the bottom surface of the water tank is provided with a water tank heater. However, ARGENTIERI teaches a heated recording chamber in which a heater is adhered to the bottom of a serpentine passageway (water tank) to heat the liquid flowing into the cavity containing the cell or tissue sample (Column 3, lines 47-52). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the fluid heater of ARGENTIERI. The motivation would have been that ARGENTIERI discloses exposing the fluid to the heater allows the temperature of the liquid to reach and stabilize at the temperature required of the liquid bath in the cavity (Column 3, lines 52-56).

b. With respect to claim 39, BAKER discloses a clip to hold the culture dish in the countersink to maintain alignment of the culture cells (Column 4, lines 8-11). Baker does not explicitly disclose the means for securing the specimen container to be the holders with screws as defined in the specification according

to 35 U.S.C. 112 6th paragraph interpretation of the claim. However ARGENTIERI teaches a heated recording chamber where the tissue recording chamber (specimen container) is retained in position on a microscope stage through the use of clamps (holders) secured to the stage by knurled screws (Column 2, lines 40-49). At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER to include the clamps and screws of ARGENTIERI. The motivation would have been that ARGENTIERI discloses the clamps allow relatively precise positioning of the chamber with respect to the objective lens which must be brought into close proximity to the sample or cell in the recording chamber (Column 2, lines 49-55).

19. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252), in view of KITAGAWA (US 4629862) as applied to claims , 22, 23, 27, 28, 32, 33, and 37 above and further in view of ARGENTIERI (US 5241415).

a. With respect to claim 35, the combination of BAKER and KITAGAWA provides for an incubator with a plate type heater. BAKER and KITAGAWA do not explicitly disclose a heater with a heating portion formed of a transparent conductive film. However, ARGENTIERI discloses a heated recording chamber in which the preferable heater is a heating element consisting of a grid of wires embedded within a clear mylar film (transparent conductive film) (Column 3, lines 3-13). This heating element is then placed on the bottom of the tissue recording chamber (container-placing portion). At the time of the invention, it would have

been obvious to one of ordinary skill in the art to modify the incubator for light microscopy of BAKER with the plate heater of KITAGAWA to include the clear mylar film encased heating element of ARGENTIERI. The motivation would have been that ARGENTIERI discloses the heating element below the tissue recording chamber keeps the temperature constant of the liquid bath in the chamber (Column 3, lines 1-4). ARGENTIERI also discloses that the wires of the heater are in a grid which provides transparent windows so that the tissue and cells in the chamber are illuminated with the same intensity as if the wires of the heating element were not present (Column 3, lines 58-67).

20. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252), in view of ARGENTIERI (US 5241415) as applied to claims 34 and 39 above and further in view of KITAGAWA (US 4629862).

a. With respect to claim 36, BAKER and ARGENTIERI do not explicitly disclose the lid of the closing the upper end of the incubator unit having a heating portion of transparent conductive film. However, the clear mylar film embedded with a heating element consisting of a grid of wires of ARGENTIERI as described in the above rejection includes an adhesive backing for adhering the heating element to the tissue recording chamber (Column 3, lines 11-13). The heating film disclosed by ARGENTIERI is made to be transparent so that there is no difference in light intensity due to its presence (Column 3, lines 58-67). However KITAGAWA discloses a sample heater for use in microscopes in which the container is heated from two opposite sides, including a sheet heater on the top

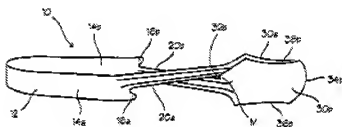
(lid of incubator) of the culture container (Column 11, line 67- Column 12, line 3).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the light microscopy of BAKER to include the transparent conductive film of ARGENTIERI in the location of KITAGAWA. The motivation would have been that KITAGAWA teaches that addition of a heater on the top plate allows for the container to be rapidly heated preventing the formation of waterdrops on the upper inner plate of the container which reduce visibility in the container (Column 12, lines 1-10).

21. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over BAKER (US 4301252), in view of KURESHY (US 5192506) as applied to claim 30 above, and further in view of CHAN (US 6056342).

a. With respect to claim 40, the limitations of claim 30 concerning the incubator are considered met by the above combination of BAKER and KURESHY. Neither BAKER nor KURESHY explicitly disclose tongs for use with the incubator. However, CHAN discloses multi-purpose tongs with a U shaped handle (connected at rear ends), two gripper arms crossed in the middle, two holding members (urging portions) and anti-slide abutments (pinching portions) between the crossed arms and the holding members to prevent further movement of the arms (Column 3, lines 26-40). The tongs are opened by a user pinching the handle inwards (elastically deformable material) causing the holding members to separate. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the light microscopy of BAKER with the

incubator door of KURESHY to include the tongs of CHAN. The motivation would have been that CHAN discloses the tongs are of efficient and low cost construction and versatile for use holding small articles and are easily cleanable (Column 2, lines 17-25).



Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. SCHEIDEGGER (US 3472726) discloses a heatable stage with a housing mounted on the microscope stage and inner housing for a specimen with apertures through both.
- b. BARNA (US 4275646) discloses a kitchen utensil with a similar shape of the claimed tongs.
- c. FISHER (US 4436385) discloses a specimen holder for use with microscopes to hold a variety of containers such as Petri dishes.
- d. LAI (US 5019691) discloses a thin conductive film heating element.
- e. DIBATTISTA (US 5731587) discloses a temperature controlled specimen stage for a microscope.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIELLE HENKEL whose telephone number is (571)270-5505. The examiner can normally be reached on Mon-Thur: 7:30am-5pm, Alternate Fridays: 7:30am-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barbara Gilliam can be reached on 571-272-1330. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DBH

/Barbara L. Gilliam/

Art Unit: 4128

Supervisory Patent Examiner, Art Unit 4128